

WHAT IS CLAIMED IS:

- 1 1. An information handling system comprising:
2 plural processing components interfaced to handle information;
3 an operating system operable to coordinate operation of the plural processing
4 components and having a power down state for reducing energy
5 consumption;
6 a quiescent state function module associated with the operating system and
7 operable to perform functions on the information handling system with
8 the operating system in a quiescent state;
9 a quiescent state module associated with one or more of the plural processing
10 components and operable to selectively intercept a power down call
11 from the operating system to the processing components to enter the
12 power down state, the quiescent state module further operable to call
13 the quiescent state function; and
14 a quiescent state utility associated with the operating system and operable to
15 configure the quiescent state module to intercept a power down call, to
16 configure the quiescent state module to call the quiescent state function
17 upon intercept of the power down call, and to initiate entry of the
18 operating system to the power down state.
- 1 2. The information handling system of Claim 1 wherein the quiescent
2 state function module is further operable to command recovery of the operating
3 system from the power down state.
- 1 3. The information handling system of Claim 1 wherein the power down
2 state comprises an ACPI S3 state.
- 1 4. The information handling system of Claim 3 wherein the quiescent
2 state module comprises a BIOS module.

1 5. The information handling system of Claim 4 wherein the quiescent
2 state module recovers the operating system from the S3 state with a BIOS S3 resume
3 command.

1 6. The information handling system of Claim 3 wherein the operating
2 system comprises WINDOWS.

1 7. The information handling system of Claim 5 wherein the quiescent
2 state function module comprises an application running on DOS.

1 8. The information handling system of Claim 1 wherein the quiescent
2 state function module configures one or more processing components to perform the
3 function by commanding the BIOS to restore end of POST configurations.

1 9. A method for running a quiescent state function on an information
2 handling system, the method comprising:
3 initiating a power down state of the operating system;
4 intercepting a power down state command sent from the operating system of
5 the information handling system to one or more components of the
6 information handling system;
7 initiating at the intercept of the power down state command a quiescent state
8 function on the information handling system; and
9 recovering the operating system from the power down state.

1 10. The method of Claim 9 wherein the power down state comprises an
2 ACPI S3 power down state.

1 11. The method of Claim 10 wherein intercepting a power down state
2 command further comprises:
3 setting a flag in the BIOS to indicate that a S3 suspend call is fake;
4 receiving an S3 suspend call at the BIOS;
5 checking the flag to determine that the S3 suspend call is fake; and

6 precluding the sending of S3 suspend commands from the BIOS to the
7 components of the information handling system.

1 12. The method of Claim 11 wherein initiating a power down state further
2 comprises:

3 setting a pointer in the BIOS to indicate the location of the quiescent state
4 function; and
5 calling the location of the quiescent state function after receiving the S3
6 suspend call and determining that the S3 suspend call is fake.

1 13. The method of Claim 9 wherein the quiescent state function comprises
2 a ROM flash.

1 14. The method of Claim 9 wherein the quiescent state function comprises
2 a hard disc drive backup.

1 15. The method of Claim 9 wherein the quiescent state function comprises
2 a BIOS warning screen.

1 16. The method of Claim 9 wherein the quiescent state function comprises
2 a diagnostics function.

1 17. The method of Claim 16 wherein the diagnostics reconfigures a CPU
2 or chipset of the information handling system and wherein recovering the operating
3 system further comprises a BIOS S3.

1 18. A method for performing quiescent functions on an information
2 handling system, the method comprising:
3 setting a quiescent state flag in the information handling system BIOS;
4 setting a quiescent function pointer in the BIOS that points to the location of a
5 quiescent function;
6 initiating a power down state with the operating system to place the operating
7 system in a quiescent state;
8 communicating the power down state to the BIOS;

9 preventing power down commands from the BIOS to the information handling
10 system components; and
11 calling the quiescent function location to initiate the quiescent function.

1 19. The method of Claim 18 further comprising:
2 configuring devices with the quiescent function.

1 20. The method system of Claim 18 further comprising:
2 configuring devices to operate under the quiescent function by restoring end of
3 POST configurations before calling the quiescent function.

1 21. The method of Claim 18 further comprising:
2 reserving memory to run the quiescent function with the operating system
3 before initiating the power down state.

1 22. The method of Claim 18 further comprising:
2 reserving memory to run the quiescent function by POST.